

Amendment C  
Application No. 10/735,474  
Attorney Docket 60005161-0061

### REMARKS

Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

#### Claim 1 - Objections

At line 3, claim 1, "user configured" has been replaced with "user and configured". Applicant therefore requests reconsideration and withdrawal of the objection to claim 1.

#### Claims 1 - 4, Section 101

Applicant requests reconsideration of the rejection of claims 1- 4 under 35 U.S.C. 101.

Claim 1 has been at lines 2 - 3 to recite "array adapted to be implanted" instead of "array implanted beneath the scalp of a user". Therefore, Applicants respectfully request withdrawal of the Section 101 rejection of claim 1.

#### Claim 7, Section 112

Claim 7 request reconsideration of the rejection of claim 7 under 35 U.S.C. 112, first paragraph.

Claim 7 has been amended to more clearly recite the steps of the claimed invention.

Accordingly, Applicants respectfully request withdrawal of the Section 112 rejection of claim 7.

Amendment C  
Application No. 10/735,474  
Attorney Docket 60005161.0061

Claims 1, 2 and 5 - 8, Section 102(e)

Claims 1-2 and 5-8 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2005/00113744 to Donoghue et al. ("Donoghue").

The enclosed Declaration of inventor Dr. Eric Leuthardt and attached Exhibits A & B confirm that the claimed invention was constructively reduced to practice before the priority date of U.S. Patent Application Publication No. US 2005/0113744 (Donoghue). Moreover, the Declaration and attached Exhibits confirm that the Applicants diligently pursued filing U.S. Patent Application 10/735,474 during a period of time beginning before the priority date of U.S. Patent Application Publication No. US 2005/0113744 (Donoghue) and lasting at least until the filing date of Application Ser. No U.S. Patent Application 10/735,474.

Accordingly, Applicants respectfully request withdrawal of the Section 102(e) rejection of claims 1, 2 and 5 - 8.

Claims 3, 4, and 9 - 13, Section 103(a)

Claims 3, 4, and 9 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donoghue in view of U.S. Pat. No. 6,615,076 to Mitra et al. ("Mitra").

As set forth *supra* with respect to Donoghue, Applicants constructively reduced to practice the claimed invention before the priority date of Donoghue, and diligently pursued filing the instant U.S. Patent Application during a period of time beginning before the priority date of Donoghue and lasting at least until the filing date of the instant application. Therefore, claims 1, 2 and 5 - 8 are patentable over Donoghue.

Amendment C  
Application No. 10/735,474  
Attorney Docket 60005161-0061

Mitra teaches a neural prosthetic involving a single electrode, or a tetrode, that is implanted into the brain cortex of a subject, and then used to measure single unit firing ("SU signal"), *i.e.* spike activity of a single neuron, or the local field potential ("LFP") of a population of neurons in the vicinity of the electrode(s). Particularly, SU signals and LFP's are necessarily produced by electrodes that are in very close proximity to subject neurons, on the order of microns of distance. Thus, Mitra does not teach or suggest a brain computer interface using ECoG signals, nor does Mitra describe or suggest any brain computer interface that relies on brain signals generated from electrodes that are positioned at or above the surface of brain cortex. Therefore, Mitra cannot be relied upon to supply the deficiencies of Donoghue as a reference.

More specifically, claims 3 and 4 depend from claim 1. As set forth *supra*, claim 1 is patentable over Donoghue. When the recitations of claims 3 and 4 are considered together with the recitations of claim 1, claims 3 and 4 are likewise patentable over Donoghue and further in view of Mitra, which cannot be relied upon to supply the deficiencies of Donoghue as a reference.

Claims 9 - 13 depend directly or indirectly from claim 7. As set forth *supra*, claim 7 is patentable over Donoghue. Claim 7 clearly recites collecting ECoG signals of the user's brain activity using an ECoG based brain computer interface, and computer processing the ECoG signals to determine signals to determine an intent of the user with respect to the output device. Mitra does not describe or suggest collecting ECoG signals of the user's brain activity using an ECoG based brain computer interface, and computer processing the ECoG signals to determine intent of the user with respect to an output device. When the recitations of claims 9 - 13 are

Amendment C  
Application No. 10/735,474  
Attorney Docket 60005161-0061

considered together with the recitations of claim 7, claims 9 - 13 are likewise patentable over Donoghue and further in view of Mitra, which cannot be relied upon to supply the deficiencies of Donoghue as a reference.

Accordingly, Applicants respectfully request withdrawal of the Section 103(a) rejection of claims 3, 4 and 9 - 13.

Amendment C  
Application No. 10/735,474  
Attorney Docket 60005161-0061

### CONCLUSION

Applicant has included an Amex Credit Card Payment Form in the amount of \$225.00 for a two (2) month Extension of Time (Petition also included) to extend the time period for response through and including December 12, 2005. However, any additional applicable fees can be charged to Deposit Account No. 19-3140.

If the Examiner believes that there is any issue which could be resolved by an interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

Dated: December 12, 2005

By: \_\_\_\_\_

  
Tara A. Nealey

Registration No. 42,927

SONNENSCHN NATH & ROSENTHAL LLP

(314) 259.5867

Customer No. 26263